



I-80 SMART Corridor Project



FAQS

FALL 2014

What is a “SMART Corridor”? What is the I-80 SMART Corridor?

A SMART Corridor is a fresh approach to managing the interstate that uses technology to optimize the existing roadway. “SMART” stands for Safety, Mobility and Automated Real-time Traffic Management.

The **I-80 SMART Corridor** project is an Intelligent Transportation System (ITS) that will enhance safety, improve travel time reliability and reduce accidents and associated congestion. The I-80 SMART Corridor takes a “smart” approach to the management of one of the busiest interstates in the Bay Area and uses technology to improve traffic flow along the I-80 corridor from the Carquinez Bridge to the Bay Bridge within Alameda and Contra Costa Counties.

What is an Intelligent Transportation System (ITS)?

ITS is a combination of hardware and communication technologies that make transportation systems operate more efficiently and safely. By giving drivers accurate, real-time information, along with managing traffic entering the interstate, I-80 will be optimized to move vehicles and people in a safer and more efficient manner, without requiring the construction of new roads or the widening of existing ones.

Through the coordination of several project components, the corridor will be managed as one integrated system. This approach will enhance motorist safety, improve travel time reliability and predictability, smooth traffic flow and empower travelers to make informed driving decisions. The Bay Area is the first region in the state to use a system this extensive as a way of optimizing the management of existing infrastructure.

Why I-80 and San Pablo Avenue?

Safer, more efficient and reliable traffic flow along I-80 is essential to the current and future vitality of the Bay Area. I-80 carries about 290,000 vehicles a day and has on average one major incident a week. Currently, when a traffic incident occurs, motorists traveling at high speeds may not see the sudden slow down ahead, or may be forced to change lanes abruptly, resulting in secondary accidents that worsen congestion. Emergency vehicle access is impacted, resulting in slower incident response and recovery times.

Some motorists may exit onto San Pablo Avenue to avoid the traffic jam, but the traffic signals on San Pablo Avenue and other arterials are not currently equipped to handle the resulting increase in traffic. Gridlock occurs, impacting bus operations and traffic flow on these streets. Without knowledge of the accident location, diverted motorists stay on city streets, and traffic jams persist. Even if motorists don't detour, they don't know how long it will take them to reach their destination due to inconsistent and unreliable travel times.

What are the components of the I-80 SMART Corridor project?

- **Adaptive ramp metering** manages the flow of traffic onto and along I-80 in real time, making it safer for drivers to merge onto the interstate. The ramp meters are coordinated and can adjust the rate at which they let traffic through, alleviating backups on local streets.
- **Incident management** provides real-time information to motorists in the event of an incident to reduce unexpected lane-changes, provide easier access for emergency response vehicles and reduce secondary accidents and congestion associated with such accidents.
- **Improvements on San Pablo Avenue** and crossing arterials include "Trailblazer" signs to tell drivers who detour around an accident when to return to the interstate, and signal timing improvements to improve traffic flow and bus operations on San Pablo Avenue.
- **Traffic information boards** advise drivers of traffic conditions ahead and expected travel times.
- **Integration of interstate and local arterial information** into one region-wide system supports the management and coordination of traffic along I-80 and San Pablo Avenue in real time.

[Download a project fact sheet about these components.](#)

What are the benefits of the SMART Corridor?

There are many traffic flow and safety benefits to the project, including:

- **Enhanced safety and roadway operations** throughout the corridor.
- **Travel-time savings and reliability** with optimized traffic flow.
- **Congestion relief** along the corridor during incidents.
- **Reduction of secondary accidents** associated with congestion.
- **Improved emergency access and incident recovery time** with less congested routes for emergency vehicles.
- **Transit travel-time savings** along San Pablo Avenue and I-80 arterials.

How does the SMART Corridor improve traffic flow?

The I-80 SMART Corridor project aims to improve traffic flow and enhance safety on I-80 and San Pablo Avenue by:

- Implementing coordinated ramp meters to reduce merging collisions, smooth traffic flow onto and through the interstate and alleviate congestion on San Pablo and local arterials.
- Providing advance warning to drivers so they can slow down ahead of congested areas and move out of blocked lanes, resulting in fewer secondary accidents.
- Equipping San Pablo Avenue and cross streets with signal prioritization and longer green lights for diverted traffic and transit.
- Providing information to drivers so they can get back to the interstate past the location of an incident.
- Giving drivers information about traffic conditions ahead and travel alternatives.
- Giving priority to transit at intersections and ramps to make taking the bus faster and more reliable.

What will be different for motorists on the SMART Corridor?

The SMART Corridor will provide real-time guidance for motorists to reduce travel time and better respond to incidents. Motorists will see new information signs, boards and ramp meters along the corridor.

Overhead blocked lane and advisory speed signs on the interstate: During periods of heavy congestion, or if a lane is blocked because of an incident, overhead signs will advise motorists to reduce speed and/or change lanes. Overall, the use of these signs is expected to reduce travel times on the interstate and provide much faster access for emergency vehicles.

Transit and traffic information boards: At six decision points along the corridor, motorists will also be provided with real-time information about traffic conditions and travel alternatives that will enable them to make informed driving decisions.

Ramp metering: On-ramps to I-80 will be metered to ensure that traffic flows smoothly onto and through the interstate, reducing merging collisions. These adaptive ramp meters will communicate with each other and will be able to “flush” on-ramps to avoid excessive wait times for interstate access and associated neighborhood congestion.

Advisory signage and traffic improvements on San Pablo Avenue: Many motorists use San Pablo Avenue as a detour route when I-80 is congested. However, motorists do not know when they have passed an incident, causing unnecessary congestion on San Pablo Avenue. With the SMART Corridor, real-time information signs on San Pablo Avenue (“Trailblazer” signs) will advise motorists when to return to the interstate. Additionally, green lights will be extended for local traffic and transit, shortening travel times along San Pablo Avenue during incidents on I-80.

When will the SMART Corridor begin operation?

Construction has been visible to motorists since Caltrans began installing the overhead sign frames on I-80 in August 2014. After the signs are installed and tested individually in late 2014, the interstate, local road and ramp technology that will provide incident and congestion management must be integrated and tested. Additionally, Caltrans is coordinating with the California Highway Patrol

(CHP) and other first responder agencies, to ensure that they are fully up-to-speed before the systems go live. Full activation of the SMART Corridor is expected in Spring 2015.

How is the SMART Corridor funded?

The \$79 million project is funded by federal, state, regional and local voter-approved funds. The state funds are sourced from the Corridor Mobility Improvement Account (CMIA) created by State Proposition 1B, passed by California voters in 2006 for transportation needs, and the Traffic Light Synchronization Program for transit and arterial improvements. Local funds include Alameda County Measure B funds and Contra Costa County Measure J funds. These funds are being invested in innovative transportation solutions to meet current and future demand on one of the busiest corridors in the region.

How can I contact the project if I have questions or concerns?

You can contact the I-80 SMART Corridor project by calling the project hotline at (800) 747-5031 or sending an email to info@80SMARTCorridor.org. Find out more information on the project website, www.80SMARTCorridor.org.

What agencies and municipalities are involved with the SMART Corridor?

The I-80 SMART Corridor project is a cooperative effort between The California Department of Transportation (Caltrans); the ten municipalities along the corridor (Oakland, Emeryville, Albany, Berkeley, El Cerrito, Richmond, San Pablo, Pinole, Hercules and Contra Costa County representing the unincorporated areas); AC Transit; WestCAT; Alameda County Transportation Commission (Alameda CTC); Contra Costa County Transportation Authority (CCTA); West Contra Costa Transportation Advisory Committee (WCCTAC); and the Metropolitan Transportation Commission.